





Created: 2 weeks, 6 days after earthquake

1,000

**PAGER** 

Version 5

100,000

# **M 5.5, 118 km E of Ohonua, Tonga** Origin Time: 2021-12-27 11:34:08 UTC (Sun 23:34:08 local) Location: 21.4466° S 173.8105° W Depth: 11.4 km

**Estimated Fatalities** 10,000 1,000

and economic losses. There is a low likelihood of casualties and damage.

Green alert for shaking-related fatalities Estimated Economic Losses 30% 10,000

Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k=x1000)		_*	92k	0	0	0	0	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY			11-111	IV	V	VI	VII	VIII	IX	X+
PERCEIVE	SHAKING	Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	None	None	None	V. Light	Light	Moderate	Mod./Heavy	Heavy	V. Heavy
	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy	V. Heavy

<sup>\*</sup>Estimated exposure only includes population within the map area.

# Population Exposure

population per 1 sq. km from Landscan 5000

10000



## **Structures**

Overall, the population in this region resides in structures that are highly vulnerable to earthquake shaking, though some resistant structures exist. The predominant vulnerable building types are unknown/miscellaneous types and wood construction.

### **Historical Earthquakes**

Date	Dist.	Mag.	Max	Shaking
(UTC)	(km)		MMI(#)	Deaths
1977-06-22	257	8.0	VII(47k)	0
1983-03-21	152	6.7	VII(53k)	_
2006-05-03	147	8.0	VIII(7k)	0

### Selected City Exposure

from GeoNames.org

	g				
MMI	City	Population			
Ш	'Ohonua	1k			
III	Pangai	2k			
Ш	Vaini	3k			
Ш	Haveluloto	3k			
Ш	Nuku'alofa	22k			

bold cities appear on map.

100.

(k = x1000)

PAGER content is automatically generated, and only considers losses due to structural damage. Limitations of input data, shaking estimates, and loss models may add uncertainty.